



National Aeronautics and
Space Administration

John H. Glenn Research Center
at Lewis Field

Lewis' Educational and Research Collaborative Internship Program (L.E.R.C.I.P.)

2003 SUMMER INTERNSHIP FOR NASA Scholars

"To inspire the next generation of explorers . . . as only NASA can"

Program Description

This is an educational program that provides internships for students of science and engineering. A NASA scholar is an individual who currently receives financial support through their university from a NASA field installation or NASA Headquarters in pursuit of their educational goals through scholarships or fellowships. Internships of a 10-week duration are available during the summer months at the NASA John H. Glenn Research Center. The internships are offered under the auspices of Lewis' Educational and Research Collaborative Internship Program (L.E.R.C.I.P.), a collaborative undertaking of the Glenn Office of Educational Programs (<http://www.grc.nasa.gov/WWW/OEP>) and OAI (<http://www.oai.org>). The L.E.R.C.I.P. college component offers opportunities for graduating 2003 high school seniors through Ph.D. students.

Program Goal

Internships will provide students with introductory professional experiences to complement their academic programs and research interests. In order to accomplish this, students are given the opportunity to develop their skills in one of the following areas: assignments in research and development and technical projects under the guidance of a NASA staff member. The mentor in identifying student assignments will consider the student's academic level and field of interest, when possible. The program is designed to provide experiences in a research and development environment in order to expand the student's understanding of possible career choices that are available at NASA. Program activities include oral presentations, and a variety of scheduled enrichment activities. Because of the program's short duration and intensive requirements, no vacation time or summer classes can be taken during the internship. If selected, the student must be present for the entire 5-day, 40-hours per week, Monday through Friday.

Glenn Research Center (<http://www.grc.nasa.gov>)

The NASA Glenn Research Center defines and develops advanced technology for high-priority national needs. The work of the Center is directed toward new propulsion, power, and communications technologies for application to aeronautics and space. Glenn has been designated as the NASA Lead Center for Aeropropulsion. The Center's aeropropulsion program plays a significant role in the Agency's goals to promote economic growth and national security through safe, superior, and environmentally compatible U.S. civil and military aircraft propulsion systems.

Glenn is also NASA's Center of Excellence in Turbomachinery. The Center is committed to developing new and innovative technology and leveraging its computational, analytical, and experimental expertise in turbomachinery to future aerospace programs. Glenn leads NASA's research in the microgravity science disciplines. The Center also designs power and propulsion systems for space flight systems in support of NASA programs.

NASA Glenn at Lewis Field is located in the Great Lakes region of Ohio and occupies a 350-acre site, adjacent to Cleveland Hopkins International Airport. The Center comprises over 150 buildings, which contain a unique collection of world-class facilities. Over 3600 people staff Glenn, including civil service employees and support service contractors.

You are encouraged to review the NASA home page to learn more about Glenn's research activities and programs.

College Eligibility

Applicants must be **U.S. CITIZENS** who are full-time students pursuing a baccalaureate or higher degree in a field of science, engineering, math, and technology. Students must have a cumulative GPA of 3.0 on a 4.0 scale.

Interested secondary school teachers and high school students can obtain application information about the other L.E.R.C.I.P. programs by accessing the Office of Educational Programs web site (<http://www.grc.nasa.gov/WWW/OEP>).

Application Information:

Students seeking internships must submit an application. You will be sent a post card or e-mail acknowledging receipt of your application. All students are required to complete the entire 10-week tenure. The program does not provide for vacation time and such time should be scheduled outside the tenure period. Students are expected to adhere to the tenure period and dates specified on their application. Additional information may be obtained by contacting:

NASA GRC Office of Educational Programs
ATTN: L.E.R.C.I.P. Scholars
21000 Brookpark Road, MS 7-4
Cleveland, OH 44135
Telephone: 216-433-6656
E-mail: intern@grc.nasa.gov

Applications must be received **no later than January 15, 2003**, to assure consideration. Application materials received after the deadline will not be considered or processed.

A complete application package must include

1. An original completed, **signed** application **plus three copies**
2. Transcript(s)
3. Teacher endorsement
4. Student Application Information

College Selection Criteria

Selection in this program is very competitive and is based on the following:

- Glenn organizational/programmatic and budgetary commitments
- Academic level/relative coursework
- Performance background/research interests
- Students availability

SELECTED students will be notified by **April 15, 2003**.

Salaries

Interns receive a biweekly salary for their appointments. The amount of the salary depends on the academic standing achieved by the student at the time tenure begins and supported by student's transcripts. If selected, salary details and program information will be provided in the offer letter.

| | | | |
|--------------------|--------------------------|----------------------|--------------------------------|
| Academic standing: | Freshmen/Sophomore \$800 | Junior/Senior \$1000 | Master/Doctoral Student \$1200 |
|--------------------|--------------------------|----------------------|--------------------------------|

The normal statutory withholdings will be withheld. The tax portion withheld will depend on the tax status submitted by each individual.

Travel Allowances

One round-trip travel reimbursement is provided to students whose city of permanent residence is more than 50 miles from Cleveland and who relocate for the program. Reimbursement is based on shortest-route mileage at 36.5 cents per mile and is paid after tenure begins. This amount must not exceed \$500.00. Travel allowances are disbursed to eligible students 1 week after tenure begins.

Available Internship Tenure Dates for 2003:

| | | | |
|--------------------|--------------|--------------|---------------|
| Start dates | May 19, 2003 | June 3, 2003 | June 16, 2003 |
|--------------------|--------------|--------------|---------------|

Housing Accommodations

Students are responsible for making their own housing and travel arrangements. This program does not provide living expenses. If a list of short-term housing is desired, check the appropriate box on the application and one will be provided to you. Please understand that the housing list has been assembled by OAI for your convenience. Accommodations on the list have not been checked and OAI does not advocate them over other accommodations you may find on your own. If selected for the program, you are encouraged to start your search for housing as soon as possible.

NASA SCHOLAR STUDENT APPLICATION FORM

Please type or print in black ink only.

Legal name: _____
First MI Last

Social security number: _____

Male ☐ Female ☐U.S. citizen ☐ Yes ☐ No

Date of birth: _____

Place of birth: _____
City, State, Country

If U.S. citizen but born outside the U.S. or Puerto Rico you must provide the information requested below:

Naturalization or passport number: _____ Date issued: _____ Date expired: _____

Please check box below of where correspondence should be sent___ **School address:** [college applicants only]___ **Home address:**_____
City State Zip Code_____
City State Zip Code

Telephone: (____) _____

Telephone: (____) _____

Alternate telephone: (____) _____

Alternate telephone: (____) _____

E-mail address: _____

Cumulative GPA _____ out of 4.0

Academic level as of

Fall 2003:

(Minimum eligibility: 3.0 GPA)

☐ HS Freshman (9) ☐ College Sophomore (14)☐ HS Sophomore (10) ☐ College Junior (15)☐ HS Junior (11) ☐ College Senior (16)☐ HS Senior (12) ☐ Master Student (17)☐ College Freshman (13) ☐ Ph.D. Student (18)☐ HS Teacher (19)

Credit hours earned as of May/June 2003: _____

Total credit hours required for graduation: _____

Planned graduation date: _____

Have you previously participated in a NASA or Federal program? ___ Yes ___ No

Check any of the following NASA programs you have applied for (A) or participated in (P) previously, and indicate the year:

| (A) (P) | (Year) | (A) (P) | (Year) |
|--|--------|--|--------|
| <input type="checkbox"/> <input type="checkbox"/> SHARP | _____ | <input type="checkbox"/> <input type="checkbox"/> NASA Student Involvement Program | _____ |
| <input type="checkbox"/> <input type="checkbox"/> Glenn NASA PLUS | _____ | <input type="checkbox"/> <input type="checkbox"/> NASA Project | _____ |
| <input type="checkbox"/> <input type="checkbox"/> Glenn Engineering Technology | _____ | <input type="checkbox"/> <input type="checkbox"/> SEMAA | _____ |
| <input type="checkbox"/> <input type="checkbox"/> Glenn Explorers | _____ | <input type="checkbox"/> <input type="checkbox"/> FIRST | _____ |
| <input type="checkbox"/> <input type="checkbox"/> Glenn Shadowing Program | _____ | <input type="checkbox"/> <input type="checkbox"/> Glenn TSU College Bound | _____ |
| <input type="checkbox"/> <input type="checkbox"/> Glenn Aerospace Education | _____ | <input type="checkbox"/> <input type="checkbox"/> Other _____ | _____ |
| <input type="checkbox"/> <input type="checkbox"/> Camp (at Oberlin College) | _____ | | |

How did you learn about the program?

- ☐ Inquiry to NASA about summer opportunities
☐ Group visit to the Center
☐ Faculty member or school official
☐ Relative who works for NASA/NASA contractor

| Name | Relationship | Area/Organization |
|---|--------------|-------------------|
| <input type="checkbox"/> NASA website | | |
| <input type="checkbox"/> Office of Educational Programs website | | |
| <input type="checkbox"/> Other (please specify): _____ | | |

OFFICE USE ONLY

Date Received: _____

PR Requirement: \$ _____

Date Processed: _____

11 12 13 14 15 16 17 18 19

Initials: _____

PLACEMENT INFORMATION

Please indicate the fields in which you would like to intern *if positions are available*. If choosing more than one field, please indicate order of preference by numbering 1 through 3 with 1 being your first choice. Final student placement is determined by mentor summer assignment needs. We do not offer internships in BIOLOGY, MEDICINE, or VETERINARY MEDICINE.

| | |
|---|----------------------------------|
| _____ Aero/Astro engineering | _____ Physics |
| _____ Biomedical | _____ Polymers |
| _____ Ceramics | _____ Structural engineering |
| _____ Chemical engineering | _____ Systems engineering |
| _____ Chemistry | _____ Accounting |
| _____ Computer science/engineering | _____ Business administration |
| _____ Electrical engineering | _____ Education |
| _____ Environmental science/engineering | _____ Graphics |
| _____ Materials engineering | _____ Personnel |
| _____ Math | _____ Procurement |
| _____ Mechanical engineering | _____ Other (be specific): _____ |
| _____ Optics | _____ |

Academic Information

Current college/university: _____

City: _____ State: _____ Zip code: _____ Telephone number: (____) _____

Degree currently pursuing: ☐ B.A. ☐ B.S. ☐ M.S. ☐ Joint B.S./M.S. ☐ Ph.D.

Academic major: _____ Academic minor: _____

Will you be attending a different college/university in fall 2003? ☐ Yes ☐ No

If yes, Check reason: ☐ Transfer student ☐ Graduating senior ☐ First year graduate student ☐ Ph.D. student

If yes, to which college/university? _____

City: _____ State: _____ Zip code: _____ Telephone Number: (____) _____

All applicants, list your winter/spring 2003 courses:

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

2003 Internship Dates (must check one):

| Start date | End date |
|---------------------|-----------------------|
| _____ May 19, 2003 | _____ July 25, 2003 |
| _____ June 3, 2003 | _____ August 8, 2003 |
| _____ June 16, 2003 | _____ August 22, 2003 |

Housing Data

Do you need to be provided a short-term housing list? ☐ Yes ☐ No

Do we have permission to include your name and email address in a listing to be sent to students interested in shared housing? ☐ Yes ☐ No

Student's Narrative Statement

In the space below, tell us what you would like to achieve during your internship at Glenn. Be sure to address your academic field of interests and potential placement areas. Please type and be sure to address the following:

- Reason(s) for wanting to participate in L.E.R.C.I.P.
- Career goals/aspirations; and the educational plan you intend to use to reach your goals
- How both you and NASA will benefit if you are selected to participate

BACKGROUND INFORMATION**Academic honors/awards:**

Computer experience (be specific):

Work experience (be sure to include length/year(s) of employment) :

List special training or skills that may relate to your internship placement choice(s):

REFERENCESYou must provide two references other than the instructor providing written endorsement.

Name, Title

Telephone

Name, Title

*Telephone***CERTIFICATION**

I certify by my signature below, that I am a citizen of the United States of America and that all information contained in this application is correct. I further understand and agree that any misrepresentation or inaccurate information on this completed application will be cause for disqualification for consideration and from participation in the L.E.R.C.I.P. program and other NASA programs. I also understand that if selected to participate, I must participate for the full duration of the program and failure to do so will result in the immediate termination of my internship.

Signature: _____ Date: _____

L.E.R.C.I.P.

Scholar Placement Form

Name of scholar: _____ Date: _____

School: _____ Academic level: _____

Academic major(s): _____ Graduation date: _____

1. Name of NASA Scholar Scholarship Program you are participating in: _____

2. Number of years you have been in the program: _____

3. School/program point of contact: _____ Telephone: _____

4. Are you a *past* L.E.R.C.I.P. Scholar Participant? ☐ Yes _____ ☐ No
Year5. If past scholar participant, where did you intern at: _____
Center and/or Place Year6. If past participant at Glenn Research Center, do you want to return to the same organization? ☐ Yes ☐ No**If yes**, you are encouraged to contact your mentor to discuss the availability of summer positions.

____ I have contacted my mentor from last year and he/she is interested in hosting me again

____ I have not contacted my mentor from last year

If no, you must list possible placement areas you are interested in at Glenn.(Review the NASA home page <http://www.grc.nasa.gov> to find out about GRC programs/projects)1st Placement area: _____ Research interests: _____2nd Placement area: _____ Research interests: _____3rd Placement area: _____ Research interests: _____7. Is your summer internship stipend paid to you through your scholarship? ☐ Yes ☐ NoIf yes, does it also provide for travel reimbursement? ☐ Yes ☐ No8. Additional comments: _____

Student Application Information

Name: _____

☐ Male

☐ Female

Program you are applying for: L.E.R.C.I.P. Scholar Internship

In order to determine the degree to which members of each ethnic/racial group are reached by this announcement, NASA requests that the student check the appropriate block(s) below. Submission of this information is VOLUNTARY.

1. Racial background
 - a. ☐ African American/Black
 - b. ☐ Asian American*
 - c. ☐ Caucasian/White
 - d. ☐ Hispanic/Latino
 - e. ☐ Native American or Alaskan Native
 - f. ☐ Pacific Islander/Native Hawaiian**
 - g. ☐ Other, please specify: _____

2. Individual with disabilities***
 - a. ___ Yes ___ No
 - b. If yes, please specify: _____
 - c. Please list any special accommodations required:

*This includes, for example, China, India, Japan, and Korea.

**This area includes any of the original peoples of Hawaii; the U.S. Pacific Territories of Guam, American Samoa, and the Northern Marianas; the U.S. Trust Territory of Palau; the Islands of Micronesia and Melanesia; and the Philippines.

*** A person having a physical or mental impairment that substantially limits one or more major life activities, has a record of such impairment, or is regarded as having such impairment.

The information solicited on this form will not be available to those responsible for reviewing applications but will be used by NASA primarily to determine the extent to which various populations are represented in the applicant pool.

Applicant, fill in your name on the endorsement form, separate it from the application form, and give it along with the enclosed envelope (or a plain white envelope) to the faculty member who you are asking to provide a recommendation based on your academic ability and interpersonal skills. Because the endorsement letter is a requirement of the application package, you are encouraged to set a predetermined date with the faculty member of when you can pick up the endorsement.

L.E.R.C.I.P. TEACHER/FACULTY ENDORSEMENT

Student name: _____

The above-named student is applying for a summer internship at the NASA Glenn Research Center. The internship, if awarded will provide an opportunity for the student to work with professional staff in a professional environment. Your endorsement of the student's participation is requested in consideration of his or her potential to both contribute to and benefit from the experience. You are encouraged to list specific reasons for your endorsement. You may use the space provided below or attach a separate letter. The student's endorsement with his/her application must be received no later than **JANUARY 15, 2003**, for the student to be eligible for the program. The student should return this form in a sealed envelope with the application. If the endorsement must be sent separately it should be sent to the following address: **NASA GRC Office of Educational Programs, Attention: L.E.R.C.I.P. NASA Scholars, 21000 Brookpark Road, Mail Stop 7-4, Brook Park, OH 44135.**

I _____ **do recommend** I _____ **do not recommend**, the above student for the internship

Printed name: _____

Date: _____

SCHOOL TITLE: _____

Department: _____

Telephone: _____

Address: _____

City

State

Zip code

****Must be an instructor in applicant's area of expertise****

APPLICATION PACKAGE CHECKLIST

Before completing this application and submission, you should read it thoroughly. Special attention should be given to eligibility requirements, dates, and deadlines. Be sure to complete all blocks with information that is requested. You are encouraged to make a copy of your completed application package, as we are unable to return application material submitted for the program.

Required information: (check when completed)

- ☐ **Completed and signed application plus three complete copies**
- ☐ **Teacher/Faculty Recommendation Form** (Return in sealed white envelope. Be sure to write the student's name across the front of the envelope as well as yours. Must be received by January 15, 2003, for student to be eligible.)
- ☐ **School transcripts** (Attach your current transcript of courses completed. Transcript should include final grades for courses through 2002 fall academic semester. Unofficial photocopies are acceptable)
- ☐ **Student Application Information**

The application will not be considered eligible unless all information requested on the application is provided and an original plus three (3) copies (except faculty endorsement) are received by January 15, 2003.

Faxed copies are unacceptable!

Mail completed application package to

NASA GRC Office of Educational Programs
Attn: L.E.R.C.I.P. NASA Scholars
21000 Brookpark Road, MS 7-4
Cleveland, OH 44135

Should you have any questions, please call

GRC Office of Educational Programs

Telephone: 216-433-6656

Email: intern@grc.nasa.gov

Please be advised that any applications or application materials received after January 15, 2003, will not be considered or processed.